



205 N. Michigan Ave., 11th Floor
Chicago, IL 60601

Phone: 312-260-3326

Fax: 312-470-5571

E-mail: deborah.kuhn@verizon.com

Public Service Commission of Wisconsin
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Deborah L. Kuhn
Assistant General Counsel – Verizon Great Lakes Region

October 5, 2007

VIA PSC ELECTRONIC REGULATORY FILING SYSTEM

Ms. Sandra Paske, Secretary
Public Service Commission of Wisconsin
P.O. Box 7854
Madison, WI 53707-7854

**Re: *Investigation of Area Code Relief for the 715 Area Code in Northern Wisconsin*
PSCW Docket No. 5-TN-100**

Dear Ms. Paske:

Attached for filing is “Verizon’s Response to Notice of Investigation” in the above-referenced docket in response to the Notice of Investigation issued August 30, 2007. This filing is submitted on behalf of Verizon North Inc.; MCImetro Access Transmission Services LLC d/b/a Verizon Access Transmission Services, MCI Communications Services, Inc. d/b/a Verizon Business Services and Verizon Wireless.

We appreciate the Commission’s consideration of this matter.

Sincerely,

/s/ Deborah Kuhn

Counsel for Verizon
Deborah L. Kuhn

**BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN**

Investigation of Area Code Relief for the)	
715 Area Code in Northern Wisconsin)	5-TN-100
)	

VERIZON'S RESPONSE TO NOTICE OF INVESTIGATION

Verizon North Inc. ("Verizon North"), MCI metro Access Transmission Services LLC d/b/a Verizon Access Transmission Services ("Verizon Access"), Cellco Partnership d/b/a Verizon Wireless ("Verizon Wireless") and MCI Communications Services, Inc. d/b/a Verizon Business Services ("Verizon Business") (together, "Verizon"), hereby respond to the August 30, 2007 Notice of Investigation issued by the Public Service Commission of Wisconsin ("Commission") requesting recommendations on area code relief for the 715 Numbering Plan Area ("NPA"). Specifically, the Commission requested comments from the telecommunications industry on the economic, operational, and competitive implications of the two alternative approaches, and the schedules and implementation steps needed to effectively make the transition to a new area code under either the overlay or split alternative.

I. Introduction

The advent of new technologies and new competitive service providers, as well as the inefficient manner by which central office codes¹ have been assigned historically, has created a significant drain on available telephone numbers in recent years. To alleviate this drain of numbers and provide critical numbering resources to a given geographic area, new NPAs (or area codes) must be added to ensure consumers continue to have the ability to select the

¹ A central office code is the second set of three digits within a ten-digit telephone number in the format of NPA-NXX-XXXX. Central office codes may also be referred to as "NXX codes".

telecommunications service provider of their choice. The addition of NPAs can be accomplished through either a geographic split or an overlay.

On August 12, 2002, the North American Numbering Plan Administrator (“NANPA”), in its role as the neutral third party NPA relief planner for Wisconsin and on behalf of the Wisconsin telecommunications industry (“Industry”), petitioned the Commission to implement relief for the 715 NPA, which, at that time, was projected to exhaust during the second quarter of 2005. As explained in the Petition, the Industry reached consensus to recommend to the Commission an all-services distributed overlay (identified in the Petition as Alternative #1) as its first choice for relief for the 715 NPA, and a north-to-south geographic split (identified in the Petition as Alternative #6) in the event the Commission rejects the overlay. Conservation measures and more efficient mechanisms for allocating numbering resources were subsequently implemented, thus decreasing the demand for numbering resources in the 715 NPA. Therefore, the projected life of the 715 NPA was extended for several years and there was no immediate need for Commission action on the Petition. However, numbering resources in the 715 NPA have decreased such that the projected exhaust is now forecasted for the fourth quarter of 2009. Verizon strongly supports the primary recommendation that an all-services overlay should be adopted to provide numbering relief for the 715 NPA, and urges the Commission to reject any geographic split method.

II. Overview of Alternatives

A. Geographic Split Method

In a geographic split, the existing NPA is split into two (or more) geographic areas. The existing NPA serves one of the areas, and a new NPA is assigned to the new area created by the split. As a result, both the existing and new NPAs serve areas that are much smaller than the

original area requiring relief. The geographic split “line” usually divides the area along jurisdictional, natural or physical boundaries but, for technical reasons and number optimization considerations, the actual boundaries must conform to existing rate center boundaries.² The downside of a geographic split is that all residential and business customers residing in the newly created area must undergo a telephone number change. Moreover, geographic splits entail drawing lines based on projections about growth patterns and demographic trends, which can prove to be inaccurate over time. A perceived benefit of a geographic split is that consumers throughout the area, in both the old and new NPAs, retain seven-digit local dialing within the same NPA.³

B. Overlay Method

An all-services distributed overlay occurs when more than one NPA serves the same geographic area. Relief is provided by opening up a new NPA within the same geographic area as the NPA requiring relief. In this situation, existing customers retain their existing phone numbers, and do not have to endure the cost and inconvenience of reprinting stationery, business cards or other media, nor do they have to notify family, friends and business associates of their new telephone numbers. With an overlay, NXXs from the new NPA are available for assignment to all service providers on a first-come first- served basis and may be assigned throughout the overlay area, as demand exists. Therefore, changes in future growth patterns and demographic trends have no impact on the overlay as an efficient form of area code relief.

In an NPA overlay, existing customers are not inconvenienced by having to change their telephone numbers. Instead, they keep their area code and seven-digit telephone number,

² See ATIS-0300061, *Alliance for Telecommunications Industry Solutions (ATIS) Industry Numbering Committee (INC) NPA Code Relief Planning and Notification Guidelines*, located at <http://www.atis.org/inc/docs.asp>.

³ However, as the geographic area of an NPA shrinks with the implementation of a split, it should be noted that potentially more ten-digit dialing across NPA boundaries occurs where the split line divides communities of interest.

eliminating the cost and nuisance of changing their stationery, business cards or advertising as a result of the new NPA. Only new customers, or perhaps existing large customers requesting a large block of new numbers, would be assigned numbers from the new NPA. An NPA overlay will end the further shrinking of the geographic size of the area code because subsequent relief can be easily implemented via another overlay.

When an NPA overlay is implemented, the FCC requires that ten-digit dialing be implemented for all local calling within the overlay area.⁴ Due to this dialing pattern change, the overlay method does require some degree of public education. However, because many areas of the country have chosen the overlay methodology to provide numbering relief in the last five years, general public awareness of overlays has grown considerably in recent years. When NPA overlays are implemented, the permissive dialing period allows customers to become accustomed to the new dialing pattern. The overlay is truly the best and most equitable relief method for consumers, because all consumers are treated equally and no customers have to change their telephone numbers. Further, overlays can be implemented in a shorter time frame than geographic splits,⁵ which can ensure numbering resources are available to all service providers when needed, and to ensure that consumers continue to have the ability to select the service provider of their choice.

III. Economic Implications

A. Geographic Split Method

Unlike an overlay, an area code split would not treat consumers who have a 715 telephone number today in an equitable manner. A split would force half of the consumers in the 715 NPA to change their phone number, requiring them to contact their family, friends and

⁴ FCC 96-333, ¶ 286.

⁵ FCC 96-333, ¶ 278.

business associates to provide them with their new number. An area code split would place potentially onerous financial burdens on small business owners and operators in the affected area by requiring them to change their company stationery, business cards, and advertisements, in addition to contacting their existing customers to inform them of a new business phone number. For an independent business operator who relies heavily on repeat and referral business, such as a real estate agent, broker or contractor, the loss of an established phone number could place them at a competitive disadvantage, jeopardize their business, and result in financial loss. The businesses forced to change their telephone numbers might suffer lost customers and revenues due to increased misdialing, as a result of a split.

Area code splits inequitably burden one half of the existing customers, and in some cases, will require customers to change numbers already changed more than once due to prior splits.⁶ Every customer forced to change his or her number will likely experience some difficulty in the process (i.e. suffer losses, costs, and inconveniences) that could be avoided by an overlay.

B. Overlay Method

When an overlay is implemented, there are virtually no economic impacts to consumers because no one is required to change his or her number. In fact, eliminating the need for consumers to change their telephone numbers has many important advantages, including the following:

- No consumers will be forced to change or “give back” their telephone number.
- No businesses will be required to endure the unnecessary cost and inconvenience of changing stationery, business cards, signage, yellow page advertising and other advertising, websites, brochures, catalogs, etc.

⁶ Although not the case in the 715 NPA, customers in other states have suffered multiple number changes due to splits being implemented in areas where prior splits were previously implemented. For example, consumers in the California 951 NPA today were previously part of the 909 NPA until it split in 2004, and the 909 NPA was part of the 714 NPA until it split in 1992. However, it should be noted that the 714 NPA enjoyed many years of stability, having been originally created in 1951 when the 213 NPA was split.

- Overlays circumvent the risk to small businesses, independent contractors and agents (i.e., real estate agents, construction or household maintenance contractors, tax consultants, brokers etc.) that may not have regular contact with their clients, who may conduct business on an ad-hoc or seasonal basis, or who may rely heavily on referrals for ongoing work. An overlay would not put individuals in such occupations at undue financial risk where the loss of their phone number could force them out of business.
- For residential customers, adopting an overlay instead of a split will obviate the need for customers to contact friends and distribute updated phone numbers to virtually everyone they know.
- Overlays treat all consumers equally; there is no “wrong side” of an overlay, whereas an area code split necessarily provides “preferential” treatment to some users who are allowed to retain their existing numbers, and “discriminates” against others who are forced to change their phone numbers.

Further, the adoption of an overlay for relief of the 715 NPA would serve as a model for a consistent policy for providing additional numbering resources across the state of Wisconsin. Overlays represent a progressive approach to introducing additional numbering resources and are currently the most prevalent form of area code relief adopted by state commissions across the country, including the two newest overlays adopted on July 12, 2007 in Utah⁷ and on September 20, 2007 in California.⁸

IV. Operational and Competitive Implications

A. Geographic Split Method

As mentioned above, for those customers required to change their numbers, the problems associated with a split range from the inconvenience of residential customers having to tell friends and family members of their new numbers to the enormous costs imposed on small and

⁷ In April 2000, the Utah Public Service Commission (UPSC) adopted a geographic split for relief of the 801 NPA, but upon the request of eight service providers and a supporting recommendation from the UPSC staff, the UPSC rescinded the split and adopted an overlay instead. See *Order Selecting Area Code Overlay, and Reversing April 13, 2000 Order Selecting Area Code Split*, Docket 07-999-01, dated July 12, 2007.

⁸ See *Application of the North American Numbering Plan Administrator, on behalf of the California Telecommunications Industry, for Relief of the 714 Numbering Plan Area*, D.07-09-025, Opinion Granting Request for Area Code Overlay in the 714 Area Code, issued September 24, 2007, Docket A.07-03-010, filed March 13, 2007.

large businesses associated with changing out business cards, printed invoices, stationery, and other media. For some small businesses, the outcome can become even more disastrous by resulting in their losing contact with satisfied customers. By adopting an overlay, the Commission can avoid such unfortunate consumer experiences and circumvent similar damaging situations to residents and business owners. Many people have different reasons why they need to maintain their current number, even for reasons that do not directly tie to geography. For some customers, a consistent number is the only way that they can remain connected.

In a geographic split, approximately half of the existing customers are required to change their telephone numbers, and costly and time-consuming modifications to central office switches are required. While some newer service providers have a much smaller customer bases and thus fewer tasks to complete in implementing a split, it should be noted that quite often the incumbent local exchange carrier (“ILEC”) has a substantially larger customer base and many more tasks to complete in a split. Because of this, the majority of the cost and burden of implementing a split is placed then upon the ILEC and its customers. In addition, under a split, wireless consumers on the “wrong” side of the split are required to change numbers. Some of these wireless customers may have older phones that cannot be reprogrammed “over the air” and may face additional inconvenience by needing to visit a retail store for manual phone reprogramming by wireless company personnel. If such phones are not successfully reprogrammed by the end of the permissive dialing period, they may fail to work completely⁹ until the new number is programmed into the handset. Even with the “over the air” reprogramming, if a wireless customer is an infrequent user or out of the country, he or she may miss the reprogramming

⁹ Customers whose phones are not reprogrammed by the end of the permissive dialing period are still able to dial 9-1-1 in an emergency and 6-1-1 for customer service.

transmissions. That could result in service interruption and/or a trip to the wireless service provider's retail store to correct the problem.

Additionally, industry experience demonstrates the technical difficulty for service providers to fully comply with Local Number Portability ("LNP") requirements where an area code split occurs and these technical issues can be avoided with the implementation of an overlay. The Number Portability Administration Center ("NPAC") houses the routing information for all ported and pooled numbers. During the night of initiating permissive dialing, the NPAC personnel must update the database to include both the old and new NPA. On the same night, all service providers in the affected NPA must update their operational support systems with the new and old NPA so that port requests will complete within the designated time frames. Port requests can fail or create a backlog if the service provider's operational support systems are not synchronized with the NPAC. In addition, updating is required to the service providers' Local NPAC databases, Local Service Management System ("LSMS") and networks, as well to include both the old and new NPA and the NXXs associated with each. All of these updates create additional opportunity for error that can result in misrouted or denied calls, thus leading to consumer dissatisfaction. In fact, history has shown in other states (i.e. California) that consumers experienced more problems related to porting their number in a split environment than after an overlay.

B. Overlay Method

There are neither technical or operational obstacles, nor feasibility or competitive impediments that would prevent an overlay from being an effective choice in either a large or small geographic area. Geography is immaterial to the consideration of the actual service provider system changes, (*e.g.*, over the air activations, number portability realities) which must

be accomplished for implementation to succeed. With an overlay, it is unnecessary to manually reprogram wireless devices for customers who have no “over the air” reprogramming capability; this type of problem is avoided.

Many service providers operating in the 715 NPA provide service nationally, and many have national systems supporting their customer base across the United States. These systems can easily handle implementation of an overlay in the 715 NPA, just as they have across the nation in numerous other overlay implementations.

In addition, there is little doubt that the demand for numbering resources in the current 715 NPA will continue to grow in the decades to come, but the Commission cannot know today where more or less growth will occur and where demand for numbers will be highest. Rather than make educated guesses that a split today will avoid area code change in the future, consumers are better served by the implementation of an overlay now, rather than facing another split in the future. By adopting an overlay for relief of the existing 715 NPA, no customers will have to face the burden of a split yet again. As experience has shown across the nation, consumers readily adapt to 10-digit dialing without worrying about yet another area code split.

Finally, there is no requirement that an overlay be implemented only over small NPAs. In other states, overlays have been used effectively to avoid repeated splits and have covered large geographic areas, and areas containing both urban and rural areas. Examples where area code overlays have been implemented in large geographic areas include the 903/430 overlay in northeastern Texas (part of the area is in metropolitan Dallas and part is in rural areas) implemented in 2003, and the 706/762 overlay (adjacent to the Atlanta metropolitan area at one

edge but including large areas of more rural environment) implemented in Georgia in 2006.¹⁰ In Utah, the Commission just approved implementing an overlay over a large area in Central Utah (the 801 NPA), overturning its previous decision for a geographic split. With a decision to implement an overlay in the 715 NPA, the Commission avoids the negative and unnecessary impacts of a geographic split and joins the progressive action taken in many other states.

V. Schedules and Implementation Steps

A. Geographic Split Method

In the petition filed with the Commission in 2002, the industry declined to recommend an implementation interval for a geographic split, but industry experience over the years has shown that splits require more time for implementation. A geographic split is much more customer impacting, plus the network and operational support system tasks associated with splits are more complex than those required for overlays. But most importantly, splits inconvenience customers and require more interaction between the service provider and the customers. Such tasks include, but are not limited to:

Customer Communications

- Create and distribute bill messages for customers that receive bills;
- Create and distribute text messages for wireless customers that do not receive bills;
- Create and distribute collateral for retail stores such as countertop or point of sale (POS) register displays for customer education throughout permissive dialing period;
- Create and distribute direct mail to customers to drive customer behavior (such as wireless handset reprogramming over-the-air or manually, or wireline customer-owned equipment);
- “Hotline” wireless customers to Customer Service at mandatory dialing when customers with non-OTA capable handsets haven’t had their handsets reprogrammed yet;

Internal Communications

- E-mail communications to all affected internal departments: Network, IT, Marketing, Sales Operations, Customer Service, Training, Public Policy, and others;
- Create and distribute methods & procedures documents for affected internal departments;

¹⁰ Similarly, the entire state of Maryland is covered by two overlays. The 301/240 overlay covers the suburban Washington, DC area of Maryland as well as much more rural western Maryland. The other overlay, the 443/410 overlay includes the urban Baltimore area, the suburbs and all of the rural eastern shore of Maryland.

- Create and distribute refresher training on wireless phone reprogramming for affected internal departments

Internal Tasks

- Network: Translations changes in affected switches; modification of E911 and Operator services call routing patterns; test call scenarios; troubleshooting; recorded messages for calls to the wrong NPA post-mandatory dialing; ensure appropriate NXXs are posted and flagged in NPAC for correct call processing pre- and post-mandatory dialing.
- Information Technology: Billing System changes; message-processing changes in wireless point of sale systems and all other affected provisioning systems.
- Database Conversions: wireline customer records conversion; wireline Automatic Number Identification (ANI) conversion (potential impacted systems/services include E911, voicemail, voice dialing, caller ID, phone smart, LNP, toll free calling, operator services and transfer of calls).
- Marketing and Sales Operations (Direct, Indirect, Reseller Channels): Identify quantity of non-OTA capable handsets impacted by NPA change; develop and distribute phone reprogramming process to wireless customers; develop and distribute communication notification for sales channels; ensure appropriate staffing to support wireless phone reprogramming; develop training for over-the-phone wireless phone reprogramming process, coordinate process for older wireless phones where reprogramming requires machines or tools; develop wireless phone reprogramming process for indirect channels; develop communication notification for indirect channels; and notify resellers of area code changes and wireless phone reprogramming processes.
- Training Department: Facilitate and coordinate training for all internal departments on area code split processes and wireless phone reprogramming processes.
- Customer Service: Develop and distribute internal communications; ensure appropriate staffing for additional call volume for split-related issues; refresher training on wireless phone reprogramming.
- Product Marketing: Notify 411 vendor of changes needed in databases and any other vendors of area code changes.

Many of these tasks are eliminated with the implementation of an overlay, and thus, an overlay can be implemented much more quickly and efficiently than a geographic split.

B. Overlay Method

In the petition filed with the Commission in 2002, the industry recommended a 19-month period to implement NPA relief via an overlay smoothly and seamlessly. In 2002, it typically required three months following the issuance of an order to convene the industry, determine an orderly implementation schedule, and issue the planning letter. Following the completion of these activities, service providers needed approximately nine months to accomplish associated

network activities and prepare customer education materials. This period was followed by six months of permissive dialing, and then one month to allow for the activation of NXXs from the new NPA. Since 2002, the industry has gained a wealth of experience in implementing overlays more quickly and efficiently. Verizon suggests that a 15-month period¹¹ is sufficient for a smooth and effective overlay implementation for relief of the 715 NPA.

Given the projected fourth quarter 2009 exhaust date for the 715 NPA, the industry needs to launch the start of 15-month period for implementation of an overlay in the second quarter of 2008. Therefore, it is critical that the Commission render its Order within the first quarter of 2008. By implementing an overlay, the industry and consumers are assured of achieving maximum life expectancy from the new NPA, as this approach will likely outlast any split configuration. In addition, when subsequent numbering relief is required, a third NPA can be overlaid onto the existing two with minimal requirements for additional customer education and no impact to customer dialing or their telephone numbers.

VI. Conclusion

Nationwide, overlays are now common and routine. Even in the August 2005 decision on the 310/424 overlay, the California Commission noted that since the implementation of number pooling in November 2002, all area code relief within the United States (with the exception of the 909/951 area code split) had been done through overlays.¹² The Commission further noted that, at that time, 23 overlays had been implemented within 14 states.¹³

¹¹ The 15-month period would consist of a 3-month planning period, a 5-month “network readiness” period, a 6-month permissive dialing period, and a 1-month activation period.

¹² *In the Matter of the Petition for Modification of Decision 00-09-073 filed on March 9, 2005, Order Instituting Investigation on the Commission’s Own Motion into Competition for Local Exchange Service*, D.05-08-040, p. 15, issued August 25, 2005.

¹³ *Id.*

Since 2005, this trend has continued such that 72 overlays¹⁴ have been implemented in 18 states, the Territory of Puerto Rico, Canada and the Dominican Republic.¹⁵ Since the implementation of the 909/951 split in California, overlays have been used in all but two implementations of area code relief in the United States.¹⁶

The Public Service Commission of Wisconsin has an opportunity to adopt a prospective NPA relief policy in favor of overlays as NPAs in Wisconsin reach exhaust. By doing so, the Commission will move towards a consistent and progressive approach for numbering relief in Wisconsin, allow consumers to keep their numbers into the future, and avoid revisiting this issue in detail in each planning effort.

For the foregoing reasons, Verizon urges the Commission to adopt the all-services overlay with a 15-month implementation interval, and to reject the use of any geographic split in the 715 NPA. Verizon further encourages the Commission to consider the adoption of new policy guidance in its decision that the use of overlays is the preferred mechanism for area code relief within the state absent compelling circumstances to the contrary.

¹⁴ This number includes planned area code overlays that have been adopted by the state or other jurisdiction but have not yet been put into service.

¹⁵ Puerto Rico and the following states have implemented (or ordered) at least one all-services overlay: California, Colorado, Florida, Georgia, Illinois, Massachusetts, Maryland, Michigan, Mississippi, North Carolina, New Jersey, New York, Ohio, Oregon, Pennsylvania, Texas, Utah and Virginia. Ten states have more than one overlay. Interestingly, even states with few area codes have adopted overlays. For example, Mississippi, Oregon, Maryland, Utah, and Colorado each have only 3 or 4 NPAs in total but have adopted an overlay to avoid further area codes splits. In addition, Canada has five overlays and the Dominican Republic has one.

¹⁶ The State of New Mexico adopted a split for relief of its single 505 NPA, likely because the entire state was considering NPA relief implementation for the first time. The only other split adopted since 2005 was the 270 NPA split adopted by the Kentucky Commission earlier this year.

Dated: October 5, 2007

By: /s/ Deborah Kuhn
Deborah Kuhn
Assistant General Counsel
Verizon Great Lakes Region
Verizon
205 N. Michigan Ave., 11th Floor
Chicago, Illinois 60601
(312) 260-3326 (telephone)
(312) 470-5571 (facsimile)
deborah.kuhn@verizon.com

A. Randall Vogelzang
Vice President and General Counsel
Verizon Great Lakes Region
HQE02H37
600 Hidden Ridge
Irving, TX
(972) 718-2170
randy.vogelzang@verizon.com

**Counsel for Verizon North Inc., MCI metro
Access Transmission Services LLC d/b/a Verizon
Access Transmission Services and MCI
Communications Services, Inc. d/b/a Verizon
Business Services**

By: /s/ Lolita D. Forbes
Lolita D. Forbes
Counsel
Regulatory Law Group, Legal and External Affairs
Verizon Wireless
1300 Eye Street, NW, Suite 400 West
Washington, DC 20005
(202) 589-3772
lolita.forbes@verizonwireless.com

**Counsel for Cellco Partnership d/b/a Verizon
Wireless**